

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-17 are now pending in this application.

Information Disclosure Statement

Applicant acknowledges receipt of a signed and initialed copy of the PTO/SB/08 form submitted with the Information Disclosure Statement of July 14, 2009.

Applicant notes that an Information Disclosure Statement and PTO/SB/08 form were submitted on November 3, 2009. Applicant respectfully requests that a signed and initialed copy of this PTO/SB/08 form be provided with the next Office correspondence.

Rejections under 35 U.S.C. § 112

Claim 1 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the enablement requirement. This rejection is respectfully traversed.

The Office argues on page 2 of the Office Action that “the specification is not clear as to the vector average of projections because it is not clear what is intended to be claimed as ‘projections.’” Applicant respectfully submits that the amendments to the claims overcome this issue and render the rejection in regard to this issue moot.

In addition, Applicant notes that the test for enablement is whether the disclosure of an application enables a person skilled in the art to make and use the claimed invention without undue experimentation. See MPEP § 2164.01. Applicant notes that Applicant’s

specification discusses the vectors recited in claim 1 and the vector average recited in claim 1. For example, at least page 13, line 28, to page 18, line 3, of Applicant's specification discuss and explain the projections and vector average recited in claim 1. As discussed in Applicant's specification, Figure 11 shows an example of a vector V4 that is a vector average of the projections of vectors V1, V2, V3 in a plane perpendicular to a web 2, with the projections stretching out in the transverse direction of the web.

Applicant respectfully submits that the disclosure of Applicant's application enables one of ordinary skill in the art to make and use the claimed invention without undue experimentation.

The Office also argues on page 2 of the Office Action that the language "respective trajectories of different jets sucked and/or blown combustion products" is unclear and not enabled. Applicant notes that this language was deleted from claim 1 in the amendment filed August 27, 2009. In addition, the Office argues on page 2 of the Office Action that the language "a vector average" and "said vectors" is not enabled because it is unclear which vector is recited. Applicant respectfully submits that the amendments to the claims overcome these issues and render the rejection in regard to these issues moot. In addition, Applicant notes that a lack of enablement is based on whether the disclosure of an application enables a person skilled in the art to make and use the claimed invention without undue experimentation, not whether the scope of the claims is clear.

Reconsideration and withdrawal of this rejection is respectfully requested.

Claim 1 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. This rejection is respectfully traversed. The Office argues on page 3 of the Office Action that the language "said vectors" following the language "a vector average" lacked antecedent basis. Applicant respectfully submits that the language "said vectors" did have antecedent basis in the language "wherein respective trajectories of the different jets are represented by vectors." In addition, Applicant respectfully submits that the amendments to the claims both above and in the August 27, 2009 amendment render this rejection moot. Reconsideration and withdrawal of this rejection is respectfully requested.

Rejection under 35 U.S.C. § 102

Claims 1-2, 4-7, and 15-17 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 4,653,396 to Wennerberg (hereafter “Wennerberg”). This rejection is respectfully traversed.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See MPEP § 2131.

Wennerberg discloses a recirculating air calendar roll control device 10 for a roll 12 of a calendaring apparatus 14. See Wennerberg at col. 3, lines 27-29. In a first embodiment, nozzles 18 are dispersed along the length of the roll 12 with electrically resistive heating elements that heat air passing through the nozzles. See Wennerberg at col. 3, lines 27-38, and Figure 1. A vacuum plenum 22 recirculates air emitted by each nozzle 18. See Wennerberg at col. 3, lines 39-43, and Figure 1.

In a second embodiment, a blower 124 forces air through plenum 116, through a cylindrical chamber 132 that includes heating elements 120 and 121, and out through a slot 136 in the wall of the cylindrical chamber 132. See Wennerberg at col. 4, lines 18-37, and Figure 2. In a third embodiment, a supply plenum 216 and heating elements 220, 221 are located in a cylindrical chamber 232 that provides heated air to the roll 12. See Wennerberg at col. 4, lines 38-48, and Figure 3.

However, none of these embodiments includes radiant elements that produce combustion products, as recited in claim 1. Instead, heating elements of these embodiments are resistive elements that produce heat due to electrical resistance, not combustion. Claims 2, 4-7, and 15-17 depend from claim 1.

A fourth embodiment of Wennerberg uses infrared radiation heat lamps 338 within a cylindrical chamber 332 to heat the surface of a calendar roll 312. See Wennerberg at col. 4, lines 49-68, and Figure 4. Stack gas from a facility smoke stack 340 is supplied by a blower 324 and plenum 316 to the cylindrical chamber 332. See Wennerberg at col. 5, lines 1-11, and Figure 4.

However, Wennerberg does not disclose that the radiation heat lamps 338 produce combustion products, which is understandable because they are lamps, or that the stack gas is a combustion product of radiant elements, as recited in claim 1. Furthermore, the device of Wennerberg is a calendaring device, not a drier installation for drying a web, as recited in claim 1.

In addition, Wennerberg does not disclose a mixing device arranged to suck and/or blow at least part of the combustion products of radiant elements, with the sucked and/or blown combustion products comprising different jets, wherein respective trajectories of the different jets are represented by vectors, each of said vectors having a projection in a plane perpendicular to said web and stretching out in the transverse direction of said web, wherein a vector average of the projections of the vectors in the plane perpendicular to said web and stretching out in the transverse direction of said web has a component parallel to the web that is smaller than said maximum web width of said web, as recited in claim 1.

Wennerberg is silent in regard to these features. For example, Wennerberg does not discuss or describe jets of sucked and/or blown combustion products of radiant elements or vectors representing respective trajectories of the jets, as recited in claim 1. Nor does Wennerberg discuss or describe that the vectors have a projection in a plane perpendicular to a web and stretching out in the transverse direction of the web, with a vector average of the projections of the vectors in the plane perpendicular to the web and stretching out in the transverse direction of the web having a component parallel to the web that is smaller than a maximum web width of the web, as recited in claim 1.

The device of Wennerberg provides no manner for controlling jets of sucked and/or blown combustion products such that a vector average for combustion products has a component parallel to the web that is smaller than said maximum web width of said web, as recited in claim 1. Instead, the device of Wennerberg only provides devices for controlling the temperature of the heated air or gas. Although the drawings of Wennerberg show arrows depicting the flow of air or gas out of nozzles or within chambers, Wennerberg provides no devices or structure to control or limit the length of trajectories of this air or gas. Wennerberg provides no devices or structure to control how the gas or air is emitted from the nozzles and

slots in the embodiments of Wennerberg or to control the size of projections of vectors in a plane perpendicular to a web and stretching out in a transverse direction of the web, as recited in claim 1.

Applicant notes that the drier installation of claim 1 advantageously reduces the amount of mechanical mixing energy needed to suck and/or blow different jets of combustion products, provides smaller losses of thermal energy by radiation and convection, and provides a compact drier installation that sucks and/or blows combustion products at the highest possible temperature. See Applicant's specification at page 3, line 26, to page 4, line 11.

For at least the reasons discussed above, Wennerberg does not anticipate claims 1, 2, 4-7, and 15-17 because Wennerberg does not disclose all of the features of claim 1. Reconsideration and withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claim 3 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Wennerberg. This rejection is respectfully traversed. As discussed above, Wennerberg fails to disclose or suggest all of the features of claim 1, which claim 3 depends from. Therefore, Wennerberg does not render claim 3 to be unpatentable. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 8-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wennerberg in view of U.S. Patent No. 5,416,979 to Joiner (hereafter "Joiner"). This rejection is respectfully traversed. Joiner fails to remedy the deficiencies of Wennerberg discussed above in regard to independent claim 1, from which claims 8-11 depend. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 12-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wennerberg in view of U.S. Patent No. 4,146,361 to Cirrito (hereafter "Cirrito"). This rejection is respectfully traversed. Cirrito fails to remedy the deficiencies of Wennerberg discussed above in regard to independent claim 1, from which claims 12-14 depend. Reconsideration and withdrawal of this rejection is respectfully requested.

Double Patenting Rejection

Claims 1-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of copending U.S. application No. 10/591,393. Because this is a provisional rejection regarding a copending application, Applicant respectfully requests that this rejection be held in abeyance. In addition, Applicant respectfully requests that the Office reconsider this rejection in view of the amendments made to the claims.

Further, Applicant respectfully submits that the Office has not made a proper case of nonstatutory obviousness-type double patenting because the Office only argues on page 8 of the Office Action that although claims 1-20 of copending U.S. application No. 10/591,393 do not disclose or suggest all of the features of claims 1-17 that it would have been a matter of obvious design choice to modify claims 1-20 of copending U.S. application No. 10/591,393 to provide these missing features. However, the Office does not provide any evidence or support in the prior art to show that these features are known in the prior art. For at least these reasons, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Conclusion

Applicant submits that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741.

Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a

rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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